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10/657,476	09/08/2003	Anthony Sanding	UTL 00072	2679
75	90 03/29/2006		EXAM	INER
Kyocera Wireless Corp.			SHEDRICK, CHARLES TERRELL	
P. O. Box 928289 San Diego, CA 92129-8289			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/657,476	SANDING, ANTHONY				
Office Action Summary	Examiner	Art Unit				
	Charles Shedrick	2617				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was praid to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirr rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 11/23	3/05.					
	action is non-final.					
, <del>_</del>	, <del> _</del>					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-24</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-24</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>23 November 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:						
<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>						
3. ☐ Copies of the certified copies of the prior	•					
application from the International Bureau	ı (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Di 5)  Notice of Informal F 6)  Other:					

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#### **DETAILED ACTION**

## Response to Arguments

Applicant's arguments filed 11/23/05 have been fully considered but they are not persuasive. Regarding Claims 13-19, Applicant argues that claim 13 claims, among other things, "a call terminator configured to terminate the over-the-air programming call when the end session detector detects the end of the over-the-air programming session". Note that this element is claiming the termination of the OTA programming call, not merely terminating a SW update session as disclosed by the Herle reference. However, based on the above assertion by the applicant, Herle still reads on the claimed invention which provides for programming a mobile unit over the air and among other things terminating the programming. In view of the amendment regarding releasing the over the air programming call, Herle's method of termination stills reads on the amended claim. Therefore, the examiner respectfully maintains the rejection and as amended.

Claims 14 –19 are rejected with respect to the above argument.

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 13-15, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Herle (U.S Patent Application Publication # 2004/0261073 A1).

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Consider claim 13, Herle shows and discloses a wireless communication system 100 (figure 1) comprising; a plurality of base stations 101,102,103 (figure 1); a protocol for over-the air programming (i.e., mobile stations 111-114 can communicate over multiple access channels) (paragraph 0017) and for releasing an over the air programming call (i.e., the main processor is under the control of the update program. The main processor 240 determines whether there is more update software code, If no more SW remains the software update procedure ends) (figures 4 and 5 paragraph 0045, 0046,0060,and 0061); and a mobile subscriber unit 111 (figure 1); comprising end of session detector (main processor 240) (figure 2) configured to detect the end of an over-the –air programming session 520 (figures 4 and 5); and a call terminator (main processor 240) (figure 2) configured to terminate the over-the-air call when the end of session detector detects the end of the over-the-air programming session (figures 4 and 5 and paragraph 0045,0046,0060, and 0061).

Consider claim 14, and as applied to the system in claim 13 above. Herle further discloses that the plurality of base stations 101-103 could include a digital base stations (i.e., communication line 131 may be any suitable connection means such as analog or digital which could inherently necessitate a digital vs. an analog base station 101-103) (pg 2. paragraph 0023)

Consider claim 15, and as applied to the system in claim 13 above. Herle further discloses that the plurality of base stations 101-103 could include an analog base stations (i.e., communication line 131 may be any suitable connection means such as analog or digital which could inherently necessitate a digital vs. an analog base station 101-103) (paragraph 0023).

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Consider claim 18, and as applied to claim 13, Herle also shows a system 100 wherein a mobile subscriber unit 111 (figure 1) further comprising a circumstance evaluator (journal) configured to detect a condition (e.g., loss of power) associated with a failed over the air call release (i.e., the journal tracks application updates on a sector by sector basis) (paragraph 0038).

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herle (U.S Patent Application Publication # 2004/0261073 A1) in view of Mittal (U.S. Patent # 6,842,613 B2).

Consider claim 16, Herle discloses the claimed invention as applied to claim 13 above except that the end of session detector is not an end of session message detector.

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In the same field of endeavor, Mittal discloses a communication system 10 wherein the end of session detector is an end of session message detector (data message request detector 52) (figure 1 column 7 lines 43-47, column 8 lines 12-21, and column 9 lines 14-26).

Therefore, it would have been obvious at the time of the invention to include an end of session message detector as the end of session detector, as taught by Mittal, in the system of Herle in order to efficiently detect the end of session.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herle (U.S Patent Application Publication # 2004/0261073 A1) in view of Mittal (U.S. Patent # 6,842,613 B2) and further in view of Nodoushani (U.S. Patent # 6,144,849)

Consider claim 17 and as applied to claims 13 above. Herle discloses the step of determining when the over-the -air session has ended (figures 4 and 5).

However, Herle does not show when a session has ended comprises detecting that a timeout period has lapsed without receiving the over –the –air message from the end of session detector, wherein the over-the-air message is an end of session message

Mittal discloses an apparatus 50 (figure 1) comprising of a data message request detector 52 (figure 1) and a status reporter 54 (figure 1) capable of detecting indications of a data message request received at the receive portion, wherein the over-the-air message is an end of session message (column 7 lines 43-49).

Therefore, it would have been obvious at the time of the invention to include a end of session message detector, as taught by Mittal, as the end of session detector in the method, unit, and system of Herle in order to efficiently detect the end of session.

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However, Herle modified by Mittal does not show a method wherein the step of detecting when an over-the -air session has ended comprises detecting that a time-out period has lapsed without receiving an over-the-air message.

In the same field of endeavor, Nodoushani discloses a method of termination based on a period (time-out) of inactivity (no message indicating end of session) occurs over the interface or if a session is open too long (column 11 lines 1-6).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Herle as modified by Mittal to include a time-out period for termination on the data message request detector **52** as taught by Nodoushani to efficiently terminate overthe-air programming calls.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herle (U.S Patent Application Publication # 2004/0261073 A1) in view of Dahlin (U.S. Patent # 5,257,401).

Consider claims 19, as applied to claim 18 above. Herle discloses and shows a system comprising a plurality of base stations 101-103 comprising a digital base station and an analog base station, a mobile subscriber unit (mobile station 111) (figure 1) and a method of detecting a failed over the air call release (i.e. power intentionally or accidentally shut-off) associated with a failed over-the-air call release (i.e., the journal sectors log the release) (paragraph 0058).

However, Herle does not show where the detection comprises detecting a transition from an analog network associated with an analog base station to digital network associated with a digital base station while engaged in an over-the-air programming call.

Dahlin discloses a method of detecting a transition from an analog network associated with an analog base station to digital network associated with a digital base station while engaged in an over the air programming call (column 15 lines 26-68) (i.e., maintaining a connection (over the air programming call) while transitioning between digital and analog network).

Therefore it would have been obvious at the time of the invention to include the method of detecting a transition from an analog network associated with an analog base station to digital network associated with an analog base station as taught by Dahlin in the main processor 240 of Herle so that the current journal failure procedures could parallel failure procedures associated with transitioning from analog to digital for an enhanced recovery process.

## Response to Amendments

Applicant's arguments with respect to claims 1-12 and 20-24 have been considered but are moot in view of the new ground(s) of rejection.

### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herle (U.S Patent Application Publication # 2004/0261073 A1) in view of Noblet US Patent No.: US Patent No.: 6,912,256 B1

Consider claim 1, Herle discloses a method for an over-the-air-programming session (abstract) comprising the steps of; a mobile subscriber unit receiving the over-the – air programming session on a communication channel (paragraph 0008); the mobile subscriber unit 111 (figure 1) determining when the over-the-air session has ended (figure 4 and 5); and the mobile subscriber unit terminating an associated over-the-air programming call (paragraphs 0046 and 0061).

However, Herle does not specifically disclose releasing the communication channel.

In the same field of endeavor, Noblet discloses releasing the communication channel (i.e., a b\_ch channel associated with the OTA session is established... if no changes are required then the **Mobile** adopts the default transmission mode in stand-by and releases the allocated b\_ch and the session ends)(**fig. 1 and col. 3 lines 21 -30**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Herle to include a channel release method as taught by Noblet in an effort to free allocated resources.

Consider claim 2, and as applied to claim 1 above, Herle as modified by Noblet further discloses a method wherein the over-the-air programming session is an over-the-air service provisioning session (i.e. software update) (paragraph 0003,0045,0046,0060,0061)

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Consider claim 3, and as applied to claim 1 above, Herle as modified by Noblet further discloses a method wherein the over-the-air programming session is an over-the-air service parameter session (i.e., software update) (paragraph 0003,0045,0046,0060,0061).

Consider claim 6 and as applied to claim 1 above, Herle as modified by Noblet further discloses a method comprising the step of: a mobile subscriber unit 111 (figure 1) detecting a condition (i.e. power intentionally or accidentally shut-off) associated with a failed over-the-air call release (i.e., the journal sectors log the release) (paragraph 0058).

Consider claim 8, Herle discloses a mobile subscriber unit 111 (figure 1), comprising: an end of session detector (main processor 240) (figure 2) configured to detect the end of an over the air programming session the is received in an over the air call on a communication channel (paragraph 0008); and a call terminator (main processor 240) (figure 2) coupled to the end of session detector, the call terminator configured to terminate the over-the-air call when the end of session detector detects the end of the over the air programming session (i.e., the main processor is under the control of the update program. The main processor 240 determines whether there is more update software code, If no more SW remains the software update procedure ends) (figures 4 and 5 paragraph 0045, 0046,0060,and 0061).

However, Herle does not specifically disclose releasing the communication channel.

In the same field of endeavor, Noblet discloses releasing the communication channel (i.e., a b\_ch channel associated with the OTA session is established... if no changes are required then the **Mobile** adopts the default transmission mode in stand-by and releases the allocated b\_ch and the session ends)(**fig. 1 and col. 3 lines 21 -30**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Herle to include a channel release method as taught by Noblet in an effort to free allocated resources.

Claims 4, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herle (U.S Patent Application Publication # 2004/0261073 A1) in view of Noblet US Patent No.: US Patent No.: 6,912,256 B1 and further in view of Mittal (U.S. Patent # 6,842,613 B2)

Consider claim 4, Herle as modified by Noblet discloses the claimed invention as applied to claim 1 above, except that the step of determining when the over-the-air session has ended does not further comprise receiving an end of session message.

In the same field of endeavor, Mittal discloses that the step of determining when the overthe-air session (a download) has ended further comprises of receiving an end of session message (column 7 lines 43-47, column 8 lines 12-21, and column 9 lines 14-26).

Therefore, it would have been obvious at the time of the invention to include the end of session message, as taught by Mittal, in the method of Herle as modified by Noblet in order to efficiently detect the end of session.

Consider claim 9, Herle as modified by Noblet discloses the claimed invention as applied to claim 8 above except the end of session detector is not an end of session message detector.

In the same field of endeavor, Mittal shows wherein the end of session detector is an end of session message detector (data message request detector 52) (figure 1 column 7 lines 43-47, column 8 lines 12-21, and column 9 lines 14-26).

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Therefore, it would have been obvious at the time of the invention to include an end of session message detector as the end of session detector, as taught by Mittal, in the unit of Herle as modified by Noblet in order to efficiently detect the end of session.

Consider claim 11, and as applied to claim 9 above, Herle as modified by Noblet and as further modified by Mittal, also shows a mobile subscriber unit 111 (figure 1) further comprising a circumstance evaluator (journal) configured to detect a condition (loss of power) associated with a failed over the air call release (i.e., the journal tracks application updates on a sector by sector basis) (pg 4. paragraph 0038).

Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herle (U.S Patent Application Publication # 2004/0261073 A1) in view of Noblet US Patent No.: US Patent No.: 6,912,256 B1 and further in view of Mittal (U.S. Patent # 6,842,613 B2) and further in view of Nodoushani (U.S. Patent # 6,144,849)

Consider claim 5 and 10 and as applied to claims 1 and 8 above. Herle as modified by Noblet discloses the step of determining when the over-the –air programming session has ended (figures 4 and 5).

However, Herle as modified by Noblet does not show when a session has ended comprises detecting that a time-out period has lapsed without receiving an over –the –air message from the end of session detector, wherein the over-the-air message is an end of session message.

Mittal discloses an apparatus 50 (figure 1) comprising of a data message request detector 52 (figure 1) and a status reporter 54 (figure 1) capable of detecting indications of a data

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message request received at the receive portion, wherein the over-the-air message is an end of session message (column 7 lines 43-49).

Therefore, it would have been obvious at the time of the invention to include a end of session message detector, as taught by Mittal, as the end of session detector in the method, unit, and system of Herle as modified by Noblet in order to efficiently detect the end of session.

However, Herle as modified by Noblet as further modified by Mittal does not show a method wherein the step of detecting when an over-the –air session has ended comprises detecting that a time-out period has lapsed without receiving an over-the-air message.

In the same field of endeavor, Nodoushani discloses a method of termination based on a period (time-out) of inactivity (no message indicating end of session) occurs over the interface or if a session is open too long (column 11 lines 1-6).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Herle as modified by Noblet and Mittal to include a time-out period for termination on the data message request detector 52 as taught by Nodoushani to efficiently terminate over-the-air programming calls.

Claims 7 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herle (U.S Patent Application Publication # 2004/0261073 A1) in view of Noblet US Patent No.: US Patent No.: 6,912,256 B1 and further in view of Dahlin (U.S. Patent # 5,257,401).

Consider claim 7 and as applied to claims 6 above. Herle as modified by Noblet discloses and shows a system comprising a plurality of base stations 101-103 comprising a digital base station and an analog base station, a mobile subscriber unit (mobile station 111) (figure 1) and a method of detecting the failed over the air call release (i.e. power intentionally

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or accidentally shut-off) associated with a failed over-the-air call release (i.e., the journal sectors log the release) (paragraph 0058).

Herle as modified by Noblet does not show where the detection comprises detecting a transition from an analog network associated with an analog base station to digital network associated with a digital base station while engaged in the over-the-air programming call.

Dahlin discloses a method of detecting a transition from an analog network associated with an analog base station to digital network associated with a digital base station while engaged in the over the air programming call (column 15 lines 26-68)(i.e., maintaining a connection (over the air programming call) while transitioning between digital and analog network).

Therefore it would have been obvious at the time of the invention to include the method of detecting a transition from analog to digital as taught by Dahlin in the main processor 240 of Herle as modified by Noblet so that the current journal failure procedures could parallel failure procedures associated with transitioning from analog to digital for an enhanced recovery process.

Consider **claim 20**, Herle discloses a method for over the air programming session comprising:

A mobile subscriber unit receiving an over-the-air programming call on a communication channel to begin (paragraph 0008); the mobile subscriber unit determining when the over the air session has ended (figures 4 and 5); and the mobile subscriber unit terminating the over-the air programming call (paragraph 0003, 0045, 0046, 0060, and 0061).

However, Herle does not specifically disclose releasing the communication channel.

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In the same field of endeavor, Noblet discloses releasing the communication channel (i.e., a b\_ch channel associated with the OTA session is established... if no changes are required then the **Mobile** adopts the default transmission mode in stand-by and releases the allocated b\_ch and the session ends)(**fig. 1 and col. 3 lines 21 -30**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Herle to include a channel release method as taught by Noblet in an effort to free allocated resources.

Herle as modified by Noblet does not disclose a mobile subscriber unit transitioning from a digital network to an analog network while engaged in the over-the-air programming session.

Dahlin discloses a mobile subscriber unit transitioning from a digital network to an analog network while engaged in the over-the-air programming session (i.e. established connection) (column 15 lines 26-68).

Therefore, it would have been obvious at the time of the invention to include the method of detecting a transition from analog to digital as taught by Dahlin in the method of Herle as modified by Noblet so that the current journal failure procedures could parallel failure procedures associated with transitioning from analog to digital for an enhanced recovery process.

Consider claim 21, Herle as modified by Noblet and as further modified by Dahlin show and disclose the claimed invention as applied to claim 20 above and, in addition, Herle further discloses wherein the over-the-air programming session is an over-the-air service provisioning session (i.e., software update) (paragraph 0003, 0045, 0046, 0060, and 0061).

Consider claim 22, Herle as modified by Noblet and as further modified by Dahlin show and disclose the claimed invention as applied to claim 20 above and, in addition, Herle further

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discloses wherein the over-the-air programming session is an over-the-air service provisioning session (i.e., software update) (paragraph 0003,0045, 0046, 0060, and 0061).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herle (U.S Patent Application Publication # 2004/0261073 A1) in view of Noblet US Patent No.: US Patent No.: 6,912,256 B1 and further in view of Mittal (U.S. Patent # 6,842,613 B2), and further in view of Dahlin (U.S. Patent # 5,257,401).

Consider **claim 12**, Herle as modified by Noblet and as further modified by Mittal does not show where the detection comprises detecting a transition from an analog to digital network while engaged in the over-the-air programming call.

Dahlin discloses a method of detecting a transition from an analog to digital network while engaged in an over the air programming call (column 15 lines 26-68)( i.e., maintaining a connection (over the air programming call) while transitioning between digital and analog network.)

Therefore, it would have been obvious at the time of the invention to include the step of detecting a transition from analog to digital as taught by Dahlin in the main processor 240 of Herle as modified by Noblet and as further modified by Mittal so that the current journal failure procedures could parallel failure procedures associated with transitioning from analog to digital for an enhanced recovery process.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herle (U.S Patent Application Publication # 2004/0261073 A1) in view of Noblet US Patent No.: US Patent No.: 6,912,256 B1 and further in view of Dahlin (U.S. Patent # 5,257,401), and further in view of Mittal (U.S. Patent # 6,842,613 B2).

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Consider claim 23, Herle as modified by Noblet and as further modified by Dahlin, discloses the claimed invention as applied to claim 20 above except that the step of determining when an over-the-air programming session has ended does not comprise receiving an end of session message.

In the same field of endeavor, Mittal discloses that the step of detecting when an overthe-air session (a download) has ended comprises of receiving an end of session message (column 7 lines 43-47 and column 8 lines 12-15).

Therefore, it would have been obvious at the time of the invention to include the end of session message, as taught by Mittal, in the method of Herle as modified by Noblet and as further modified by Dahlin, in order to efficiently detect the end of session.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herle (U.S Patent Application Publication # 2004/0261073 A1) in view of Noblet US Patent No.: US Patent No.: 6,912,256 B1 and further in view of Dahlin (U.S. Patent # 5,257,401), further in view of Mittal (U.S. Patent # 6,842,613 B2), and further in view of Nodoushani (U.S. Patent # 6,144,849)

Consider claim 24, Herle as modified by Noblet as modified by Dahlin clearly teaches the claimed invention as applied to claim 20 above and, in addition Herle discloses the step of detecting when an over-the –air session has ended (figures 4 and 5).

Herle as modified by Noblet as modified by Dahlin, does not show when a session has ended comprises receiving an over -the -air message from the end of session detector.

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Mittal discloses an apparatus 50 (figure 1) comprising of a data message request detector 52 (figure 1) and a status reporter 54 (figure 1) capable of detecting indications of a data message request received at the receive portion (column 7 lines 43-49).

Therefore, it would have been obvious at the time of the invention to include a end of session message detector, as taught by Mittal, as the end of session detector in the method of Herle, as modified by Noblet, as modified by Dahlin, in order to efficiently detect the end of session.

Herle, as modified by Noblet as modified by Dahlin and Mittal, does not show a method wherein the step of detecting when an over-the –air session has ended comprises detecting that a time-out period has lapsed without receiving an over-the-air message.

In the same field of endeavor, Nodoushani discloses a method of termination based on a period (time-out) of inactivity (no message indicating end of session) occurs over the interface or if a session is open too long (column 11 lines 1-6). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Herle, as modified by Noblet Dahlin, and Mittal to include a time-out period for termination on the data message request detector 52 as taught by Nodoushani to efficiently terminate over-the-air programming calls.

### Conclusion

3. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Shedrick whose telephone number is (571)-272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid Lester can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Shedrick AU 2617 March 21, 2006

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